

U.S. Application No. 10/729,467

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REMARKS

The interview with examiner Ruddock on May 18, 2006 is acknowledged with appreciation. The examiner's interview summary is accurate as to what transpired at the interview.

Claim 14 is cancelled without prejudice or disclaimer of the subject matter therein.
Claim 16 remains canceled without prejudice or disclaimer of the subject matter therein.

New claims 17-21 are added.

Claim 1 is amended to clarify that the membrane is used underground.

Claim 1 is rejected as obvious over Colarusso et al. in view of Haushofer et al. and Muggeridge (British Patent No. 1 215 137). The office action urges it would have been obvious to have used Haushofer et al.'s polyester layer on the other side of the aluminum foil of Colarusso et al. motivated by desire to add enhanced vapor barrier properties and strength. As discussed at the interview Colarusso et al. and Haushofer et al. teach making roofing material and, as discussed by Colarusso et al. at, for example, column 3, lines 19-25 and column 2, lines 17-27, rooftop temperatures (extremes of heat and cold) cause wrinkling and buckling of the film which can destroy water-tightness of the laminate. Adding additional layers would not have been obvious to one of ordinary skill in the art without motivation to do so and a teaching that the additional layers would not cause cracking, peeling, wrinkling and/or buckling under the heat and cold extremes. Additional layers would not be advantageous on a roof because of the added weight and cost. There is no evidence that the additional layers would properly adhere throughout the temperature extremes so as to avoid the drawbacks noted above. For at least these reasons it is suggested that there is no proper motivation to combine Colarusso et al. and Haushofer et al. Reconsideration of the rejection on this basis is requested.

Claim 1 has been amended as discussed at the interview to clarify that the membrane is used underground, which is not taught or suggested by any of the prior art of record. The membrane of claim 1 is used underground and does not undergo the temperature extremes of the prior art roofing laminates. Accordingly, the claimed membrane does not undergo temperature extremes during use after installation. Claim 1 avoids the prior art for this additional reason.

Claim 4 is dependent on claim 1 and adds that the said core is laminated between a pair of fabrics at least one of which is impregnated with asphalt. None of the prior art teach or

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suggest an aluminum and thermoplastic sheets laminated with fabrics, one of which is impregnated with asphalt, as recited in claim 4. The office action urges that it would have been obvious to bond Muggeridge's bitumen impregnated felt to the roofing member of Colarusso et al. This is not correct for at least two reasons. The claimed invention requires a pair of fabrics (which is not taught or suggested in the prior art) and there is no motivation for replacing Colarusso et al.'s asphalt layer with fabric and asphalt. There is no evidence that using fabric in Colarusso et al.'s asphalt layer would do anything but drive up the cost and possibly the thickness and weight of the layer. Nothing suggests it would be any better than the asphalt layer by itself. The fabric could inhibit the desirable relative movement between layers (Colarusso, column 4, lines 52-65). Accordingly, reconsideration of the rejection of claim 4 is requested.

Claim 6 depends from claim 4 and further requires the other fabric is fiberglass. In Muggeridge the fabric discussed is felt or paper, which is not a teaching or suggestion of fiberglass. Claim 7 is dependent on claim 6 and adds that the fiberglass is impregnated with asphalt. The additional limitations of claims 6 and 7 are not taught or suggested by the prior art.

Claims 2-3, 5 and 8-13 are dependent from claim 1, directly or indirectly, and are allowable for at least the reasons noted above with respect to claim 1.

As discussed at the interview claim 15 is directed to a multi-layer vapor retarder having a pair of fabric sheets at least one of which is impregnated with asphalt, a core sandwiched between and adhesively secured to said fabric sheets, said core comprising an aluminum foil sheet adhesively secured between a pair of polyester sheets and secured thereto by means of a low density polyethylene adhesive, said sheets having an acrylic coating on their exterior surfaces. This combination is not taught or suggested by the prior art taken alone or in combination.

New independent claim 17 is directed to the combination of a concrete slab and a bituminous water vapor retarder membrane having a multi-layer core comprising an aluminum sheet laminated to at least one fabric sheet impregnated with asphalt. The prior art does not teach or suggest a membrane in combination with a concrete slab as stated in claim 17. Claims 18-21 depend, directly or indirectly, from claim 17 and are allowable for at least the reasons noted with respect to claim 17.

In view of the above, it is submitted that all of the claims (Nos. 1-13, 15 and 17-21) are in condition for allowance and such action is, respectfully, requested.

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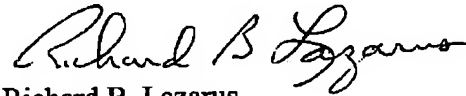
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If there is any issue remaining to be resolved, the examiner is invited to telephone the undersigned so that resolution can be promptly effected.

It is requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response with the fee for such extensions and shortages in other fees, being charged, or any overpayment in fees being credited, to the Account of Barnes & Thornburg, Deposit Account No. 10-0435 (920036-94963).

Respectfully submitted,

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